## **GLOSSARY**

Accelerated Erosion: Soil loss above natural levels resulting directly from human activities.

Active Preference: The number of AUMs available to be grazed (authorized on a grazing permit or lease).

Activity Plan: A detailed and specific plan for management of a single resource program to achieve specific objectives undertaken only when needed to implement the more general Land Use Plan decisions (e.g. allotment management plan for livestock grazing or habitat management plan for wildlife habitat).

Age Class: An age interval, usually with a 10 to 20 year span, into which a vegetative area is classified (e.g. a 80-100 year old stand of bitterbrush).

Allotment: An area of land designated and managed for the grazing of livestock by one or more livestock operators. It generally consists of public lands, but may include parcels of private or State owned lands.

Allotment Categorization: As an aid to prioritize grazing allotments for development of management plans, BLM has placed all allotments into one of three categories: improve (I), maintain (M), or custodial (C).

Allotment Management Plan: A written plan for livestock grazing management, including supportive measures if required, designed to attain specific multiple use management, sustained yield, economic and other goals in a grazing allotment.

Alluvial Plain: A former floodplain, typically composed of several layers or terraces of sediment at different elevations and of different ages -- the higher the elevation, the older the age.

Alluvium: An accumulation of sediments deposited by streams or rivers.

AUM (Animal Unit Month): The amount of forage necessary to support 5 sheep, or 1 cow and her calf, for one month.

Biological Diversity (biodiversity): The distribution and abundance of different plant and animal species and communities within an area.

Biomass: The total amount of living plants and animals above and below the ground in an area at a given time.

Browse: (1) the part of shrubs, half shrubs, woody vines, and trees available for animal consumption; or (2) to search for or consume browse.

Capability: The potential of the land to produce goods and services under a set of management practices and at a given level of management intensity. Depends on site conditions (such as climate, soils, geology), political, social, or economic constraints, as well as applications of management practices.

Catastrophic Event: A large scale, high intensity natural disturbance that occurs infrequently (e.g. flood, fire).

Channel: A waterway that contains moving water either periodically or continuously. A channel has a definite bed and banks.

Channel Form and Function: Pertaining to the natural form and function of a waterway with definite bed and banks in a particular area; specifically, channel gradient, pool frequency, width to depth ratio, roughness, sinuosity, and other characteristics play a role in the dissipation of stream energy during high water flows, sediment transport and capture, and other stream channel functions.

## Common rooting depth:

Community: An aggregation of cultural or biological units having relationships that are mutual with the environment and with each other; an assemblage of species at a particular time and place.

Connectivity: A network of habitat patches linked by areas or corridors of like habitat; it affects how organisms can move through the landscape.

Criteria to Meet Standard: Pertaining to the indicators used in the determination of the degree to which the condition of the land is consistent with the Standards for Rangeland Health and the Fundamentals of Rangeland Health.

Deferred Grazing: A grazing system where use is postponed until a later (more appropriate) time (waiting for green-up or seed-drop, etc.).

Deferred Rotation: Deferred grazing, but in a system of pastures where the deferred use is rotated between the pastures on a yearly basis (one year one pasture will receive deferred use, the next another, . . . ).

Deposition: The settlement of material out of water and onto the stream or lake bed (opposed to erosion); accumulation of eroded materials around plants or in small basins; as sediment in alluvial fans, gullies, streams, lakes; or as dunes.

Desired Beneficial Use: The use of water that is deemed beneficial and desirable; guidance for making determinations is contained in the Clean Water Act (Federal), Executive Order 12088, Porter-Cologne Act (California), Clean Water Act (Nevada), and a Memorandum of Understanding between the California Water Resources Control Board, BLM, and others.

Desired Condition: Land or resource conditions which are expected to result if planning goals and objectives are fully achieved. Formerly this was called "desired future condition".

Desired Future Condition: The future condition of rangeland resources on a landscape scale that meet management objectives. Desired future condition is based on ecological (such as desired plant community), social, and economic considerations during the land and resource planning process. Desired future condition is usually expressed as ecological status of vegetation (species composition, habitat diversity, age, and size classes of species) and desired soil qualities (conditions of soil cover, erosion, compaction, loss of soil productivity).

Desired Plant Community: The plant community that has been determined through a land use or management plan to best meet the plan's objectives for the site.

Diversity: Physical, biological, or cultural variety.

Ecosystem Elements: The basic building blocks of ecosystems. There are three fundamental types of ecosystem elements: **components** are the kinds and numbers of organisms and physical attributes that make up the ecosystem -- the "pieces"; **structures** refer to spatial distribution or pattern of these "pieces"; and **processes** refer to the flow or cycling of energy, materials, and nutrients through space and time.

Edge/Edge Effect: Areas where two physical or biological zones meet. The increased diversity in these areas is known as the edge effect.

Energy Flows: Pertaining to the flow of energy through an ecosystem; usually described as an "energy pyramid." The rates of energy flow can vary on rangelands in both space and time. An example of energy flow is -- sunlight energy is captured and converted into carbohydrates by green plants (producers) through photosynthesis; deer (primary consumers) eat the plants; coyotes (secondary consumers) eat deer; and eagles (tertiary consumers) eat coyotes.

Erosion: Detachment and movement of soil from the land by wind, water, or gravity.

Exotic Species: A species of plant or animal that is not native to the area where it is found. Any species that is not indigenous, native, or naturalized.

Facultative: Having the capacity to live under more than one specific set of environmental conditions, as an animal or plant that can live in either a wetland or upland environment (opposed to obligate).

Field Office: This is the new designation of local BLM offices. With recent reorganization of BLM in California, some of the structural hierarchy was eliminated. Within the EIS area, there are no more District Offices over-seeing Resource Area offices. All of the offices have been designated as Field Offices with a Field Manager in charge.

Floodplain: An alluvial plain caused by the overbank deposition of alluvial material. Typically appearing as flat expanses of land bordering a stream or river. Most floodplains are accompanied by a series of alluvial terraces of varying levels.

Forage: Browse and herbage which is available and can provide food for animals or be harvested for feeding.

Forb: (1) Any herbaceous plant other than those in the Gramineae (true grasses), Cyperaceae (sedges), and Juncaceae (rushes) families - i.e. any non-grasslike plant having little or no woody material on it; or (2) a broad-leaved plant whose above ground stem does not become woody or persistent.

Fragmentation: Process of reducing the size and connectivity of vegetated stands and/or habitat that comprise a rangeland or forest; a measure of connectivity in vegetative and/or habitat conditions across a landscape.

Fundamentals of Rangeland Health: As described in 43 CFR 4180; the conditions in which rangelands are in properly functioning physical condition, ecological processes are supporting healthy biotic populations and communities, water quality is meeting State standards and BLM objectives, and Special Status Species habitat is being restored or maintained.

Guidelines for Livestock Grazing: Livestock grazing management tools, methods, strategies, and techniques designed to maintain or achieve healthy public lands; as defined by the Standards for Rangeland Health.

Habitat: Natural environment of a plant or animal.

Habitat Requirements: Pertaining to the biological and physical components of the environment that are required to meet the needs of a plant or animal.

Herbaceous: Vegetation with little or no woody component; non-woody vegetation such as grasses and forbs.

Herbage: The above ground material of any herbaceous plant (grasses and forbs).

Indicator: Quantitative measure of an ecosystem element which is used to describe the condition of an ecosystem; changes in indicators over relatively short periods of time are used to measure affects of management.

Key Area: A relatively small portion of land selected, based on its location, use, or grazing value, as a location for monitoring the effects of grazing use. It is assumed that key areas, if properly selected, will reflect the effects of current grazing management over all or a part of a pasture, allotment, or other grazing unit.

Key Ecosystem Elements: A distinct subset of ecosystem elements. They are the elements over which management and society have an influence. They form the basis for evaluating the effects of management on ecosystem sustainability.

Key Species: (1) Species that, because of their importance, must be considered in a management program; or (2) forage species whose use shows the degree of use of associated species.

Landscape (Scale): An area of interacting ecosystems where patterns are repeated because of geology, landform, soils, climate, biota, and human influences throughout the area. Applied in terms of 100's to 1000's of acres.

Monitoring: The collection of information to determine the effects of resource management and to identify changing resource conditions or needs.

Native (indigenous) Species: A species of plant or animal that naturally occurs in an area and that was not introduced by humans.

Non-Use: AUMs that are normally available for use, but are not grazed through either the permittee's or BLM's request.

NorCal East: The area formerly designated as the Susanville District of BLM, currently consisting of the Surprise, Eagle Lake and Alturas Resource Areas; the area covered by the Susanville RAC.

NorCal West: The area formerly designated as the Ukiah District of BLM, currently consisting of the Arcata, Clear Lake and Redding Resource Areas; the area covered by the Ukiah RAC.

Nutrient Cycle: Circulation of chemical elements, such as carbon or nitrogen, in specific pathways from the non-living (abiotic) parts of the environment into the organic substances (plants and animals), and then back again into abiotic forms.

Obligate: Restricted to a particular set of environmental conditions. (opposed to facultative).

Objective: A measurable description of a desired future condition that specifies what is to be accomplished, location, and timeframe.

Original Use: The use of water in effect at passage of the 1978 amendments to the Federal Clean Water Act.

Patch: A small (20-60 acre) part of rangeland or forest; an area of vegetation that is internally homogeneous, differing from the vegetation that surrounds it.

Pedestaling: The occurrence of plants or rocks on pedestals means that the soil has eroded away from the base of the plant or rock and it has become slightly elevated above the eroded surface of the soil. The height of the pedestals and the degree of root exposure can serve as indicators of the degree of soil loss.

Perennial Stream: A stream that flows throughout the year for many years.

Permeability Rate (soil): The rate at which gases, liquids (water), or plant roots penetrate or pass through a bulk mass of soil or a layer of soil.

Plant Community: Assemblage of plant populations in a defined area or physical habitat; an aggregation of plants similar in species composition and structure, occupying similar habitats over the landscape.

Population Structure: The number of males and females in various age classes.

Potential: The highest ecological status an area can attain given <u>no</u> political, social, or economic constraints; often referred to as the potential natural community.

Potential Natural Community (PNC): The biotic community that would become established on an ecological site if all successional sequences were completed without human interference under present environmental conditions. Natural disturbances are inherent in its development. The PNC may include acclimatized or naturalized non-native species (SRM 1989). A particular site is classified as being in the PNC seral stage if it is 76% or more similar in plant species composition to the PNC that has been described for the site (see Table 3.3.3 for more information).

Prescribed Fire (Prescribed Burn): A controlled wildland fire ignited by humans under specified conditions, to accomplish specific, planned resource objectives. This practice is also known as "controlled burning".

Prescribed Natural Fire: A wildland fire ignited by natural causes such as lightning or vulcanism. They are allowed to burn in designated areas under conditions carefully planned to provide for safety and control of the fire.

Properly Functioning Condition (Riparian-wetlands): Riparian-wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid in floodplain development; improve floodwater retention and groundwater recharge; develop root masses that stabilize streambanks against cutting action; develop diverse ponding and channel characteristics to provide the habitat and water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. The functioning condition of riparian-wetland areas is influenced by land form, soil, water, and vegetation.

Properly Functioning Condition (Uplands): Uplands are functioning properly when the existing vegetation and ground cover maintain soil conditions capable of sustaining natural biotic communities. The functioning condition of uplands is influenced by land form, soil, water, and vegetation.

Public Lands: Those tracts of land owned by the people of the United States, that are administered by the Bureau of Land Management (BLM).

Reach: A continuous unbroken stretch of a stream with homogeneous characteristics; a section of stream between two tributaries of that stream.

Recruitment: Addition to a plant or animal population from all sources, including reproduction, immigration, and stocking.

Residual Mulch Level: The amount of vegetation left at the end of the grazing season.

Residual Plant Cover: Standing herbaceous vegetation that has cured and become decayed. When these plants fall, they become litter.

Resource Advisory Council (RAC): A group established pursuant to 43 CFR 1780 and other authorities to advise BLM on resource management issues.

Resource Area: This is the local, on-the-ground BLM management unit. With recent reorganization of BLM in California, these areas are now called Field Offices.

Rest: Leaving an area ungrazed, thereby foregoing grazing of one forage crop. Normally rest implies absence of grazing for a full growing season or during a critical portion of plant development.

Rest-Rotation: A grazing system with several pastures, one of which receives no grazing use during a year. Each year, a different pasture is rested.

Riparian: The transition area between an aquatic ecosystem and an adjacent terrestrial ecosystem identified by soil characteristics or distinctive vegetation communities that require free or unbound water.

Scale: The degree of resolution used in observing and measuring ecosystem processes, structures and changes over space and time.

Scour Erosion: The removal of a fairly uniform layer of soil or materials from the land surface by wind.

Season of Use: The time during which livestock grazing is permitted on a given area, as specified in the grazing permit and/or terms and conditions.

Section 3 and Section 15 Grazing Allotments: These designations refer to either Section 3 or Section 15 of the Taylor Grazing Act. Under the Act, grazing permits were issued for Section 3 allotments, which were in grazing districts; leases were issued for primarily small isolated parcels surrounded by private lands outside of federal grazing districts (Section 15). Under the Act, grazing receipts are apportioned differently to the counties depending upon the type of allotment.

Sediment Entrapment: A key element of stream channel form restoration; the deposition and retention of sediment in streams with sufficient riparian vegetation present at or below the bank top to successfully entrap and retain sediment during runoff.

Seeps: Groundwater discharge areas. In general, seeps have less water flow than a spring.

Seral Stage (State): Pertaining to the successional stages of biotic communities. One of a series of biotic communities that follow one another in time on any given ecological site (See Succession).

Sheet Erosion: The removal of a fairly uniform layer of soil or materials from the land surface by rainfall or runoff water.

Sinuosity: Pertaining to the curves, bends, or turns in watercourses.

Soil (Ground) Cover: The percentage of material, other than bare ground, covering the land surface. It may include live vegetation, standing dead vegetation, plant litter, cobble, gravel, stones, and bedrock.

Soil Productivity: Capacity of a soil to produce biomass through plant growth.

Special Status Species: Plant or animal species listed as endangered, threatened, candidate, or sensitive by Federal or State governments.

Species: A fundamental category of plant or animal classification.

Species Richness: Number of species, either in total or by some grouping scheme.

Standards for Rangeland Health: A description of conditions needed to sustain public land health; relates to all uses of the public lands.

Structural Diversity: The variety of the composition, abundance, spacing, size, and other attributes of plants in a community.

Structure: Patterns of association (vertical, horizontal, or temporal) among ecosystem elements; e.g. plant communities, including the growth habits, life forms, and distribution of the species.

Stubble Height Threshold: The specified minimum height (amount) of herbaceous vegetation required to be present in a given area after the livestock grazing period.

Succession: The constantly occurring process of community change; it is the sequence of communities that replace one another in a given area over time; e.g. progressive development of vegetation after a fire (bare ground) towards its highest ecological expression, the climax community (old growth conifer).

Suitability: Appropriateness of applying certain management practices to or allowing certain uses in a particular area of land.

Suitable Habitat: The biological and physical components necessary to meet some or all of the needs of a species.

Suspended Non-Use: AUMs withdrawn from authorized use; may potentially be re-authorized for use if range conditions improve.

Sustainability: The ability to maintain diversity, productivity, resilience to stress, health, renewability, and yields of desired values, resource uses, products, or services over time in an ecosystem while maintaining its integrity.

Technical Review Team: As described in 43 CFR 1784; a group formed by the Resource Advisory Council (RAC), BLM, or a RAC local team to gather and analyze data and develop recommendations to aid the decision making process.

Terms and Conditions: The provisions and stipulations specified by the BLM as a part of a livestock grazing permit or other land use authorization.

Transition Period: The period of time between completion and adoption of these standards and guidelines and their being placed in operational effect at the individual grazing permit terms and conditions level.

Upland: Land at a higher elevation than the alluvial plain or low stream terrace; all lands outside the riparian-wetland and aquatic zones.

Utilization: The proportion of a year's forage production that is consumed or destroyed by grazing animals.

Vegetation (Plant) Community: An aggregation of plants similar in species composition and structure, occupying similar habitats over the landscape.

Vegetation Corridors: See connectivity.

Vegetation Type: A plant community with distinguishable characteristics.

Viable populations: Populations of plants and/or animals that persist for a specified period of time across their range despite normal fluctuations in population and environmental conditions.

Vigor (Plant): Pertaining to characteristics such as a mix of plants with normal growth on the basis of height, color, seed production, rhizome and stolon production, and annual biomass production.

Wetlands: An area that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.

Woody Riparian Species: Plant species consisting of wood such as trees, shrubs, or bushes found in riparian-wetland areas.